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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,352	03/13/2001	Mirosław Z Bober	204207US2PCT	8286
2292	7590	11/18/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			DESIRE, GREGORY M	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,352

Applicant(s)

BOBER, MIROSLAW Z

Examiner

Gregory M. Desire

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-11 and 24-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-11 and 24-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communication filed 9/06/05.

Response to Amendment

2. The examiner acknowledges the newly added claim 37 and the cancellation of claims 4-5 and 12-24.

Claim Objections

3. Claim 11 is objected to because of the following informalities: Claim 11 depends on claim 37 a following claim. It should depend on a proceeding claim either claim 1 or 10. In order for the claim to depend on claim 37, it must be a new claim 38. Appropriate correction is required.

4. Claim 37 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-11 and 24-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbasi et al "Reliable Classification of Chrysanthemum Leaves through Curvature Scale Space" in view of Mokhtarian et al "Robust and Efficient Shape Indexing through Curvature Scale Space".

Regarding method and apparatus claims 1, 10, 24, 28 and 31-36 Abbasi discloses,

Deriving a curvature scale space representation of the object outline by smoothing the object outline (note page 287 paragraph 4 lines 2-12, curvature space representation derived by Gaussian smoothing),

Deriving at least one additional parameter reflecting the shape or mass distribution of a smoothed version of the original curve (note paragraph 4 page 288 lines 10-20 describes shape changing as smoothing of curve occurs, this is based on σ and Γ examiner interprets as parameters), and

Associating the CSS representation and the additional parameter as shape of the object (note page 291 lines 9-20, CSS and Global parameter (aspect ratio), are associated with shape);

Wherein the at least one additional parameter corresponds to the eccentricity of the outline (note page 290-291 paragraph 5 lines 1-15 lines describes additional parameter as eccentricity which is shape dependent).

Abbasi does not clearly disclose CSS as shape descriptor. Mokhtarian discloses shape descriptors (note paragraph 1.1 page 54 lines 5-7, maxima of CSS contour as shape descriptor). Abbasi and Mokhtarian are combinable because they disclose

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Curvature Space Scales. At the time of the invention, it would have been to a person of ordinary skill in the art to include shape descriptors in the system of Abbasi as evidenced by Mokhtarian. The suggestion/motivation for doing so would have been using features for shape similarity retrieval (note paragraph 1.1 lines 7-20). Therefore, it would have been obvious to combine Abbasi with Mokhtarian to obtain the claimed inventions.

Regarding method claim 2 Abbasi discloses,

Wherein an additional parameter relates to the smoothed outline corresponding to a peak in the CSS image (note page 291 lines 16-19, aspect ratio describes an additional parameter corresponds to height (peak)).

Regarding method claim 3 Abbasi discloses,

Wherein an additional parameter relates to the smoothed outline corresponding to the highest peak in the CSS image (note page 291 lines 16-19, aspect ratio describes maximum height, thus highest peak).

Regarding method claim 6, Abbasi discloses,

Wherein at least one additional parameter uses a region-based representation (note page 290, paragraph 5 lines 3-4, eccentricity is region based parameter).

Regarding method claims 7, 9 and 11 Abbasi discloses,

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Wherein an additional parameter is a region moment invariant (note page 290, paragraph 5 lines 4-7 eccentricity defines region moment).

Regarding method claim 8 Abbasi discloses,

Wherein an additional parameter is based on Fourier descriptor (note page 290, paragraph 4.3, shape descriptor is well known Fourier descriptor).

Regarding apparatus claim 25 Abbasi discloses,

Deriving a representation of an object in an image comprising a control device and storage area (note page 285 lines 10-13, computer system contains storage area and control device).

Regarding apparatus and method claims 26 and 29 Abbasi discloses,

Wherein the storage area is an image database (note page 289, paragraph 4.2 lines 1-2, shape stored in a database)

Regarding apparatus claim 27 Abbasi discloses,

A display (note page 285 lines 10-13, computer system contains storage area, control device and display).

Regarding method claim 30 Abbasi discloses,

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Wherein said determining a curvature scale space representation includes determining zero crossing points for an initial set of curves generated to produce said plurality of curves representative of said outline (note page 287-289 paragraph 4 describes zero crossing).

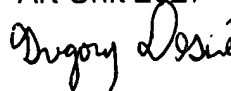
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory M. Desire whose telephone number is (571) 272-7449. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory M. Desire
Examiner
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G.D.

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November 10, 2005